

FY2014 Efficiencies and Effectiveness Report UM

The mission of the University of Missouri, as a land-grant university and Missouri's only public research and doctoral-level institution, is to discover, disseminate, preserve, and apply knowledge. The university promotes learning by its students and lifelong learning by Missouri's citizens, fosters innovation to support economic development, and advances the health, cultural, and social interests of the people of Missouri, the nation, and the world. In carrying out the University's mission is the expectation this is done in the most efficient and effective manner possible. The Collected Rules of the University highlight this concept noting "the University of Missouri shall be one University and this one University concept requires a centrally directed and unified administration and operation."

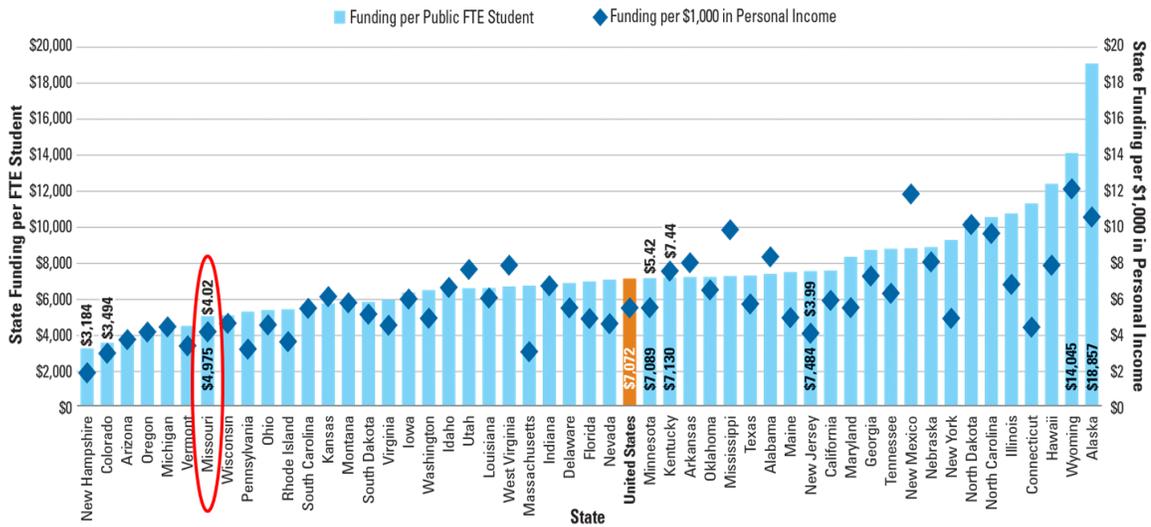
Since 2008, the University of Missouri System has faced significant revenue pressure from declining state appropriations and inflation indexed tuition. In order to maintain a balanced budget and strong financial position the University has taken up many initiatives resulting in increased effectiveness and efficiency of university operations. The results have been impressive and demonstrate the University's commitment to engage in a continuous process of identifying opportunities to reduce costs and increase efficiencies. However, the continued cost pressure is not going away. In the future, the University will need to execute current efficiencies and effectiveness initiatives while developing long term solutions to funding challenges, including competitiveness of faculty and staff compensation and deferred plant maintenance.

Public Higher Education Funding Landscape

One of the major sources of revenue for the general operation of Public Higher Education is state appropriations. In recent years this support has been on the decline across the country. The chart on the following page provides a comparison of state funding per student and funding per \$1,000 in personal income across the country. The State of Missouri ranks 44th in funding per student and is in the bottom 25% per \$1,000 in personal income.

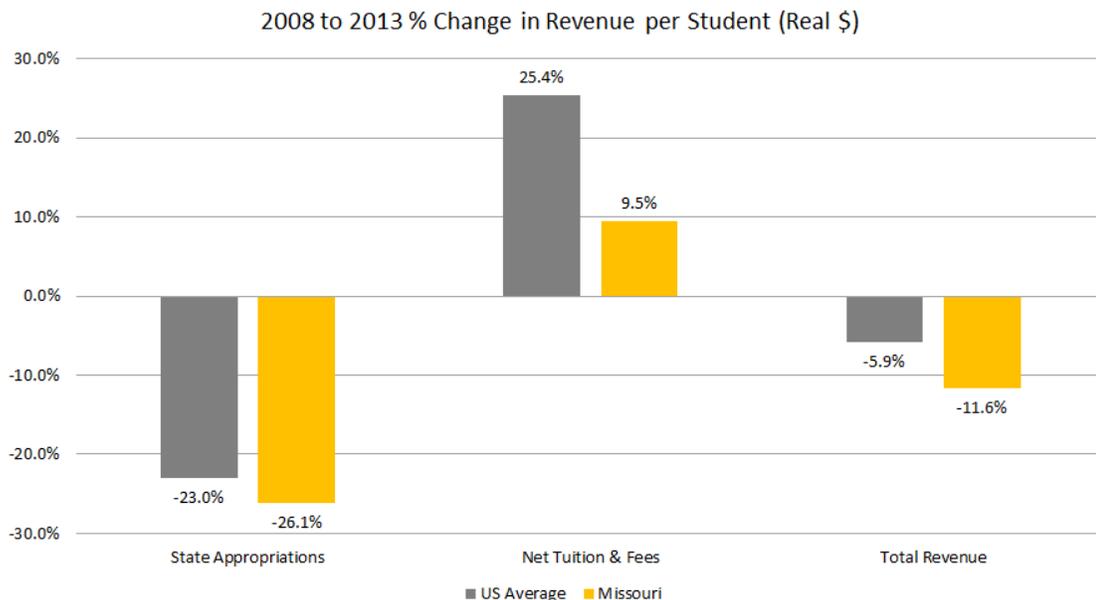
December 11-12, 2014

2013-14



SOURCE: The College Board, Trends in College Pricing 2014, Figure 17B

The response to declining state appropriations across the country has largely been answered by increasing tuition and finding modest efficiencies on the cost side of the equation. The chart below highlights how the University has been different than its industry peers. The University has faced similar reductions in state appropriations on a per student when compared to its peers. However, the University has differentiated itself in its response to this challenge. The University has not simply addressed the shortfall in state support by increasing tuition on a per student basis as many of its peers have. The University has balanced modest tuition increases with aggressive enrollment growth and a focus on efficiencies and effectiveness to maintain a balanced budget.

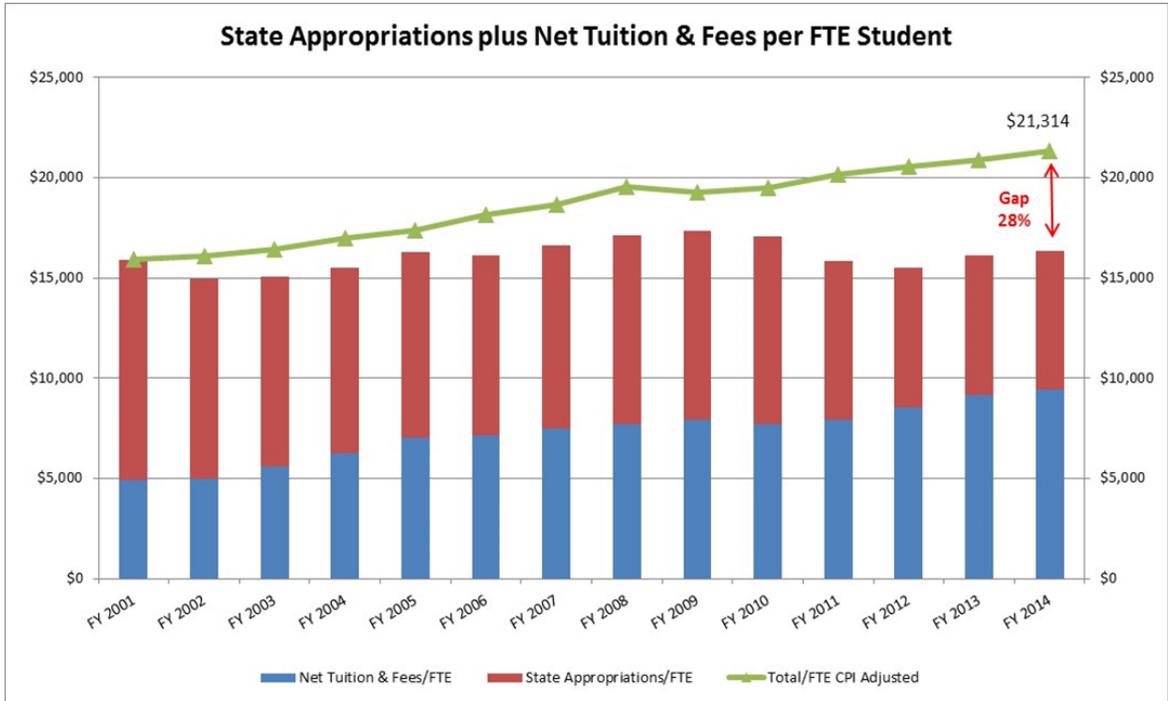


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Per Student Revenues Remain Flat

As previously discussed the, two major sources of revenue for the general operations of the University of Missouri are net tuition and fees, and state appropriations. Historically these sources have contributed 85% or more of the total resources for general operations.

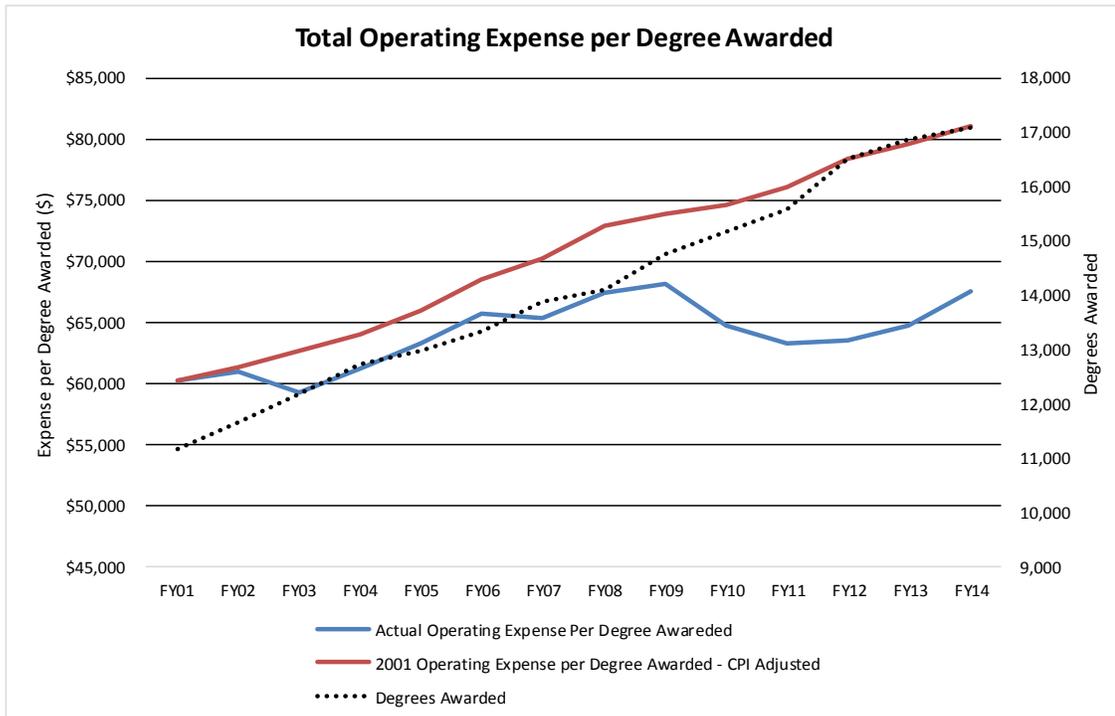
The chart on the following page shows total state appropriations and net tuition and fees per full-time equivalent (FTE) student since FY2001. As you can see, state appropriations per FTE student have declined while net tuition and fees per FTE student have increased. However, in nominal terms the University is basically receiving the same amount of revenue on a per student basis as it did in 2001. Adjusted for inflation, the combined total funding per FTE student has actually fallen 28% per FTE student, as compared to FY2001. The university’s cost management and efficiency efforts have helped to bridge this gap.



Reduction in Operating Expenditures Per Degree

One clear indicator of reduction in costs during recent years is operating expenditures per degree awarded. In real terms the operating expense per degree has declined by almost \$14,000 since FY2001, this represents a 17% reduction in cost per degree. The cost per degree for FY2014 was still below the peak of FY2009.

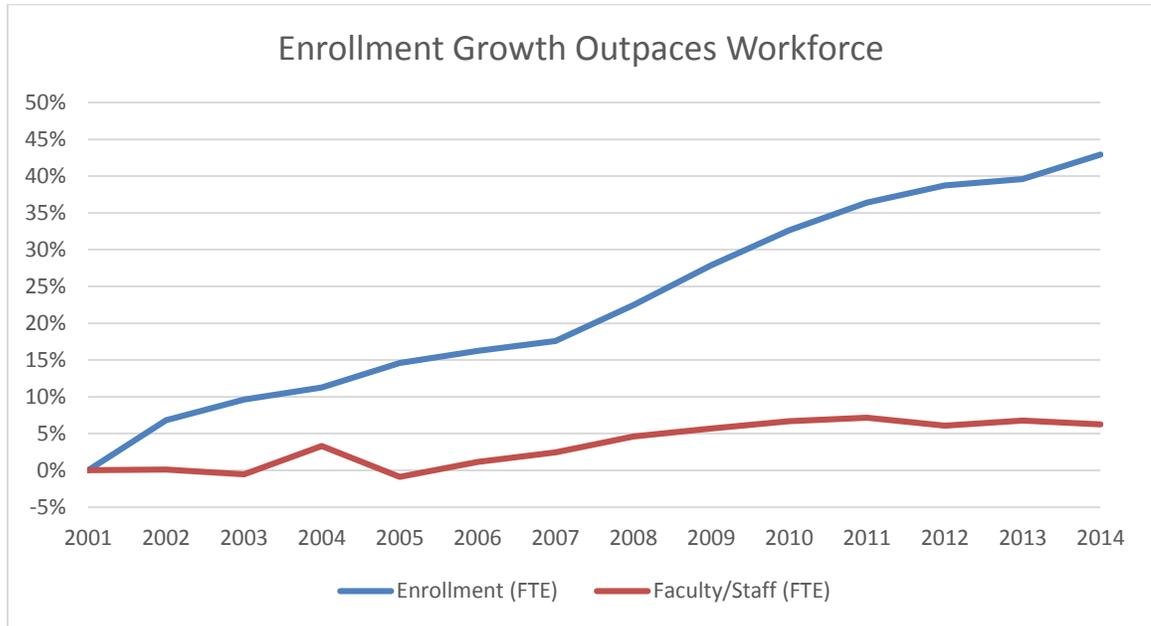
The chart demonstrates the University has steadily increased the number of degrees awarded since FY 2001 from fewer than 11,000 to over 17,000 in FY 14, while holding the cost per degree essentially flat since 2008 in nominal terms.



Additionally, over this same period the University has made significant improvement in retaining and graduation students. The six-year graduation rate for degree-seeking freshman has improved from 58% in the fall of 2001 to 65% in the fall of 2013

Leveraging Faculty and Staff

The University has achieved much of the efficiency previously discussed by growing enrollments and limiting the growth in faculty and staff. The chart below shows that enrollment has grown by more than 40% since 2001 while faculty and staff have grown by less than 10% and been constant since 2008. While this has helped the University be more efficient it has increased faculty to student ratios. National rankings (such as US & World News Report) are influenced by total expenditures per student and faculty to student ratios.



Specific Activities to Achieve Efficiency and Effectiveness

The University of Missouri has taken a holistic approach to improving both the efficiency and effectiveness of operations, undertaking projects across campuses and within each operating unit to achieve operating success. The following action items were implemented over the prior year, with cost savings listed where applicable.

Electronic Personnel Action Form (ePAF)

Historically, the Personnel Action Form (PAF) was a paper based form used to hire, terminate, promote or transfer employees into a position within the University's Human Resources system. The paper based process lead to inconsistencies across departments and campuses, processing errors, and untimely data entry impacting other processes such as onboarding. The goal of ePAF was to standardize the process, create electronic smart forms with configurable electronic routing to speed the approval process and ultimately reduce processing and approval time. Since the implementation, over 40,000 employee actions have been processed, with savings conservatively estimated to be in excess of \$2.5 million in annual operating costs.

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Accounts Payable Shared Service Center

The four campuses and System embraced the principles of shared services to consolidate and standardize the back-office accounts payable processes. The consolidation of accounts payable into the service center provided the following benefits: created one point of contact to our vendors for payment questions, allowed resources to be redeployed to focus on enhancing front-end processes that occur in departmental administration for accounts payable, and reduced cost and time when implementing business process or technological changes in the future. In addition to the increased effectiveness and consistency across the accounts payable function, the shared service center will provide \$100,000's of annual costs savings for the accounts payable process.

Electronic Grant Proposal Submission Approval

In prior years, the University utilized a paper based system requiring multiple signatures for the submission of grant proposals. The paper based process was cumbersome and generated long lead times for gathering the required approvals for proposal submission which could lead to lost awards for research projects. The project created electronic approval routing to speed the review and approval process for grant submission. On average, 3,500 proposals are submitted across the system annually seeking grant dollars. The savings from this project are minimal, but the project does reduce lead time and lead to a more effective and timely approval process for proposals.

Total Rewards Task Force Targets Benefit Spend

During fiscal year 2014, the Total Rewards Task Force provided directional recommendations to improve the University's benefit plans and address the rising cost of benefits. One of the recommendations asked the University to establish a benefit rate cap for the benefit rate charged to operating units to recover the cost of the benefit plans. As a result of the task force recommendation, the University made a commitment to maintain the current benefit rate for the next 3 years. With the cost increase trends, this results in cost avoidance of \$9 million for 2015, \$18 million in 2016, and \$27 million in 2017. The University also began to take steps to proactively manage the benefit cost inflation, such as moving the Long-term Disability Plan to a less expensive, fully insured option and creating a new custom network plan encouraging employees in the Columbia area to utilize lower cost University Health System providers in exchange cheaper premiums and lower deductibles. Importantly, all of the cost reductions/avoidance were done without lowering the levels or value of benefits.

Strategic Use of eProcurement

The UM System Supply Chain continues to deliver value as it executes on strategic initiatives. This has included increasing use of on contract spend through Show-Me-Shop. UM System Supply Chain was reorganized this year to be more efficient and improve leadership development along with expanding services. Through this process UM System Supply Chain has continued to meet or exceed on all of its shared service agreements.

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Collectively, these efforts have led to an average annual saving of approximately \$15 million over the last 5 years.

UM System Supply Chain Value Analysis Program Implementation

The UM System Supply Chain implemented a physician-driven value analysis program to evaluate the use of medical and surgical supplies within the University Health System. In fiscal year 2014, the program achieved \$9.3 million in savings based on a goal of \$7.7 million. In times where other healthcare providers are seeing large increases in their supplies expense, the University was actually able to decrease medical supplies expense by \$643,669 in fiscal 2014. Savings were also realized in the surgical units of the health system, with the Orthopedic Institute saving \$146 per case and the University Hospital saving \$217 per case. These cost cutting efforts had little effect on volume, with each operating area performing more cases than they did the prior year.

Strategic Management of our Debt and Investments

The University leveraged the historically low interest rate environment to generate up-front savings from debt restructuring for strategic investment. In the 2012 refinancing, the University was able to generate \$15.3 million in up-front savings to immediately reinvest in maintenance and repair projects to maintain the University's capital assets. During fiscal year 2014, the University was able to generate \$26.1 million in savings which will be used for additional campus strategic capital investment. Sound management of the general pool enabled the issuance of a first-time \$9.6 million dividend for FY 2014. In total, these actions generated \$51 million in new resources for the University to help address critical needs.

Staff Compensation Project

The University has been working on building a new staff compensation structure that provides consistent across the entire system and reduces the number of titles and pay ranges. The new structure allows for better market comparison and results in reductions in administrative time and expense. This project began in 2010 and was completed this year. The results of the project have created consistent processes and equity in job evaluation and salary structure. The project has reduced the number of job titles from 5,000 staff titles to 700 and moved from 1,100 pay ranges to 19, and ultimately leads to more efficient and effective talent management.

Campus Specific Initiatives

From the campus level down to the department, each operating unit remains focused on improving the efficiency and effectiveness of their operation. Several units have implemented new technology to improve student access to services, and also improve the efficiency and effectiveness of those services. Academic units continue to evaluate course formats, exploring blending and pure-online delivery to deliver the most cost effective education to their students based on the needs of the course. Campuses are also evaluating

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hiring decisions, looking to redistribute work load across operating units, and exploring the use of business centers for more efficient fiscal oversight.

Financial Condition Remains Strong

It is important to note, while the university has worked hard to make cost cuts, we have continued to balance the budget each year while also maintaining access and affordability. Further, we have met these challenges while still working hard to maintain the financial strength of the university itself. As evidence of this achievement, Moody's and S&P have recently reaffirmed the university's solid Aa1 and AA+ credit ratings. The following observations were taken directly from the recently issued ratings reports:

"Historically, the system has effectively managed through operating and capital appropriation cuts, and we consider UM's budgeting to be both conservative and proactive." Standard and Poor's report, dated October 15, 2014

"Prudent fiscal management with a focus on cost containment, enabled the university to continue to produce consistently positive operations despite variable state appropriations." Moody's report, dated October 15, 2014

Continuing Cost Pressure

The cost pressures faced by the University are showing no signs of diminishing going forward. State budgets remain strapped even in the recovery, and higher education cuts are always an easy lever to pull. There is continued focus on the cost of education with more and more states requiring legislative approval to raise tuition rates above inflation, similar to what Missouri did several years ago. Coupled with demographic changes in declining high school graduates, this means challenges in maintaining the two biggest revenue streams for public institutions, state appropriations and tuition revenue. "The time of comfortable annual growth in enrollments and revenues is over for most institutions" – National Commission on College and University Board Governance. To combat the budget cuts over the last 5 years, most University Systems have focused on the administrative side of their cost equation, but that might not be enough for the revenue cuts coming in the future. In a recent article, a former University Administrator and current industry consultant noted: efforts to wring out costs from the administrative side are "far from exhausted," But that many not be enough. "At some point," he says, "productivity gains have to come from the academic sector itself." – Chronicle of Higher Education

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The Way Forward: Continue to Increase Effectiveness and Efficiency

The University continues to maintain its proactive approach towards improving the efficiency and effectiveness of its operations, while maintaining a focus on cost containment. Over the next year, the University plans to:

- 1) Implement the recommendations of the Enterprise Resource Planning (ERP) optimization project and data center consolidation
- 2) Evaluate additional benefit plan options as recommended by the Total Rewards Task Force
- 3) Continue to leverage the results of the staff compensation project for efficient and effective talent management
- 4) Implement Voluntary Separation Program to provide flexibility in funding new faculty positions
- 5) Continue the implementation of the PwC Review of the Finance Function best practices including:
 - Defining the Finance function and related roles
 - Improving fiscal staff training and fiscal accountability
 - Enhancing the utilization of shared services for fiscal activities
- 6) Implement a plan to begin addressing deferred maintenance and repair and evaluate space utilization across the entire enterprise
- 7) Evaluate a managed travel program that is fiscally responsible and leverages buying power

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Advancing *Missouri*TM

The logo for 'Advancing Missouri' features four stylized chevron arrows pointing right, colored from left to right as black, blue, green, and red. Below the arrows, the word 'Advancing' is written in a bold, blue, sans-serif font, and 'Missouri' is written in a blue, italicized, serif font with a trademark symbol.

University of Missouri

Board of Curators

December 11-12, 2014

Finance Committee

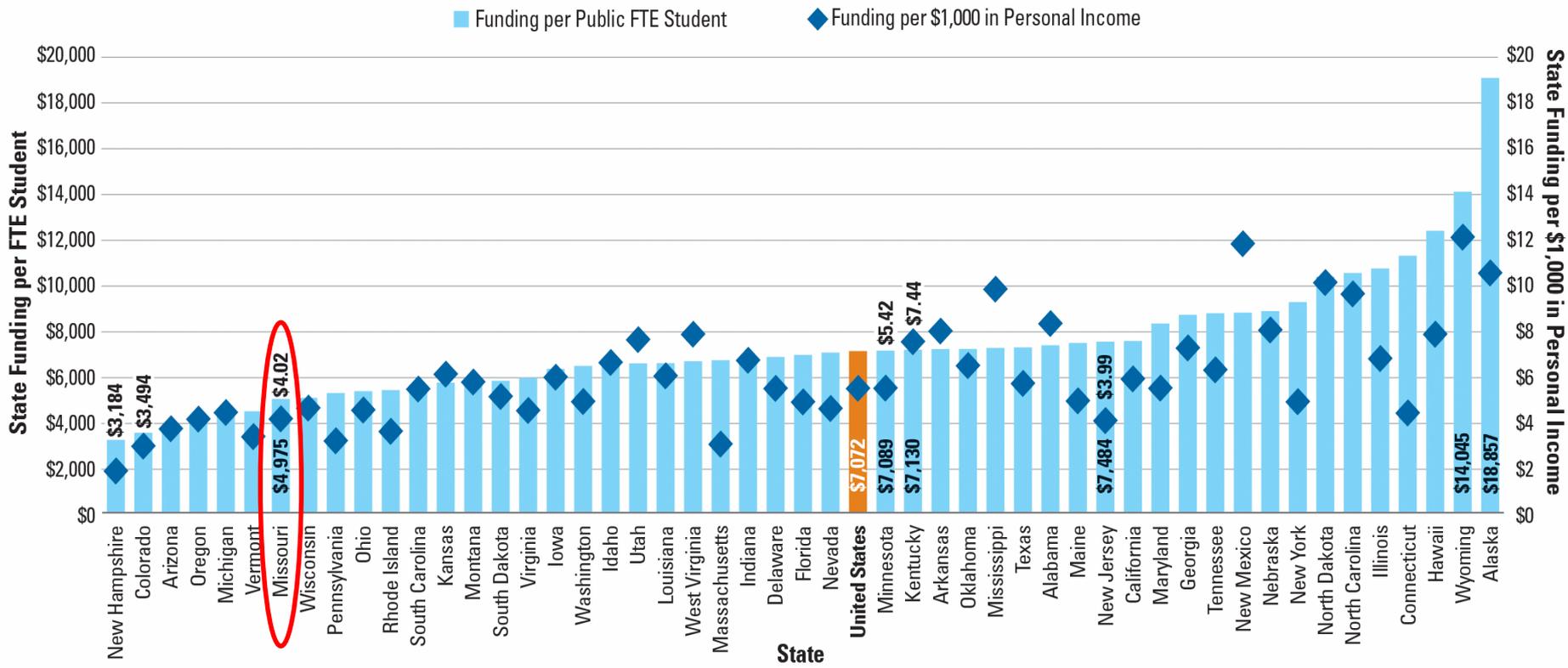
Efficiencies and Effectiveness Report

Fiscal Year 2014

State Funding for Higher Education per student

Missouri: 44th out of 50 states

2013-14

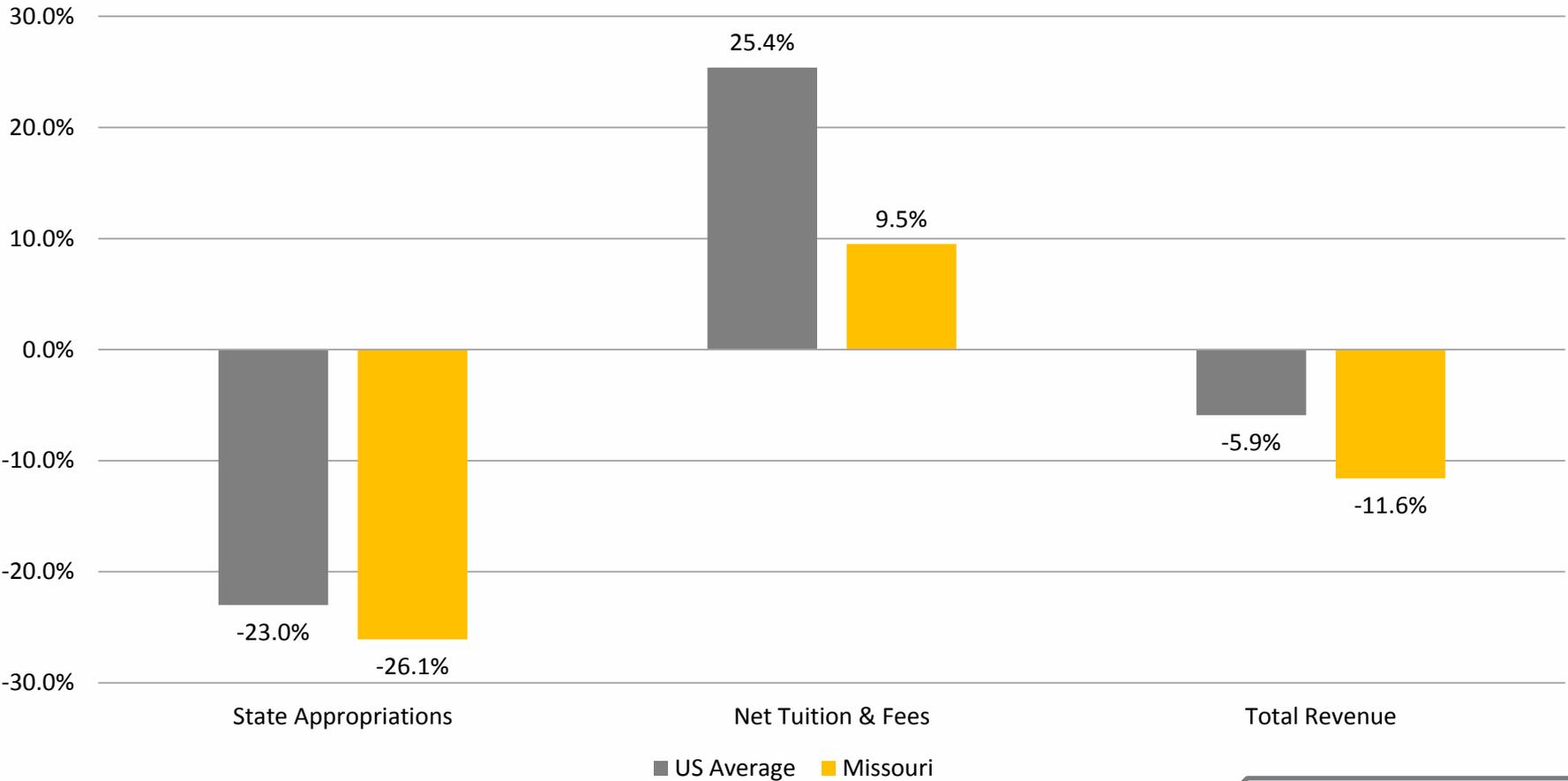


SOURCE: The College Board, Trends in College Pricing 2014, Figure 17B

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Revenue Pressure felt by Higher Ed Across the Country – Missouri hit harder

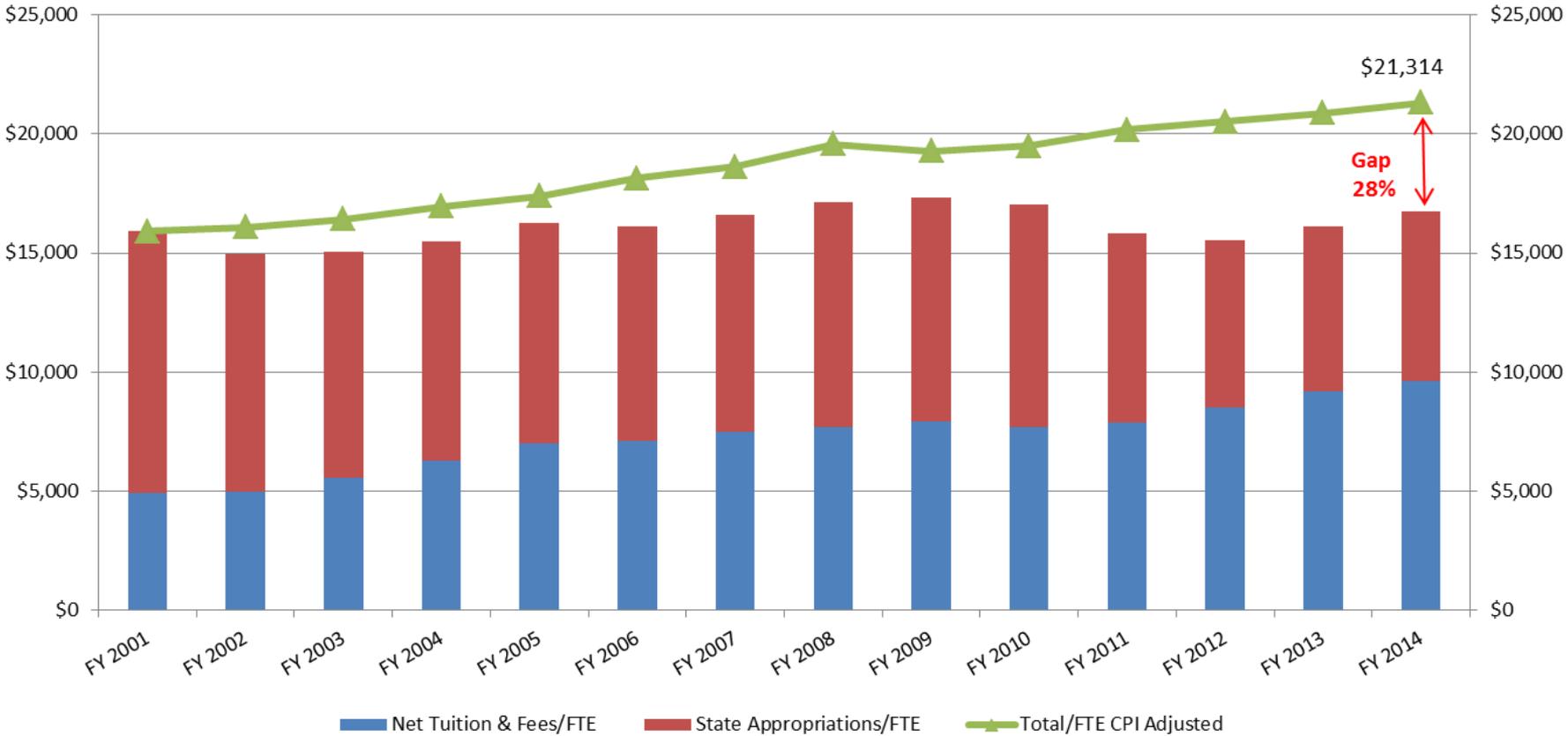
2008 to 2013 % Change in Revenue per Student (Real \$)



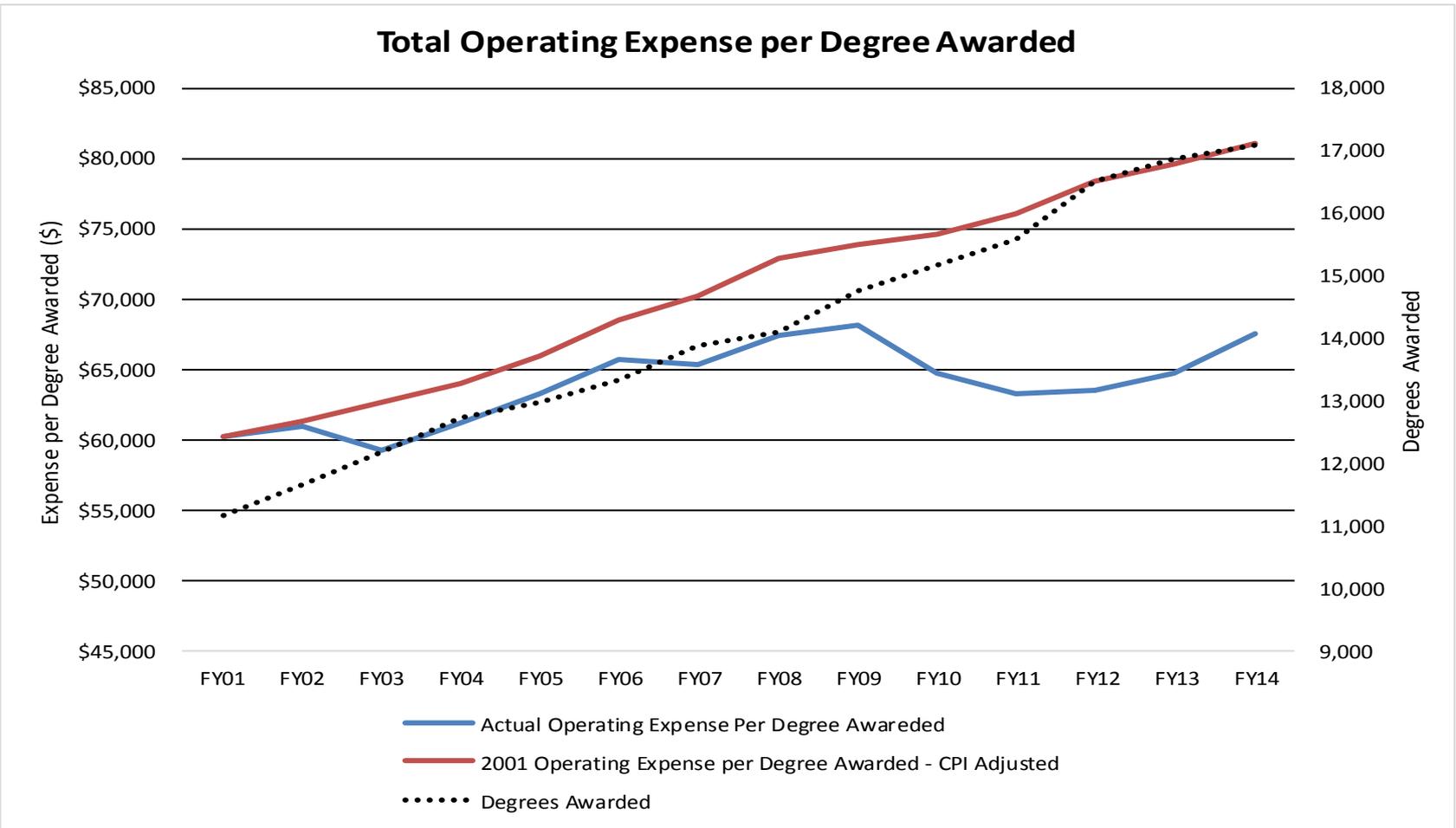
University of Missouri – Good Stewards

- *The University of Missouri takes its stewardship responsibility seriously and engages in a continuous process to identify opportunities to reduce costs and increase efficiencies.*
- ***Since 2008, the University has faced revenue pressure from declining state appropriations and inflation indexed tuition, but managed to maintain a balanced budget and strong balance sheet.***

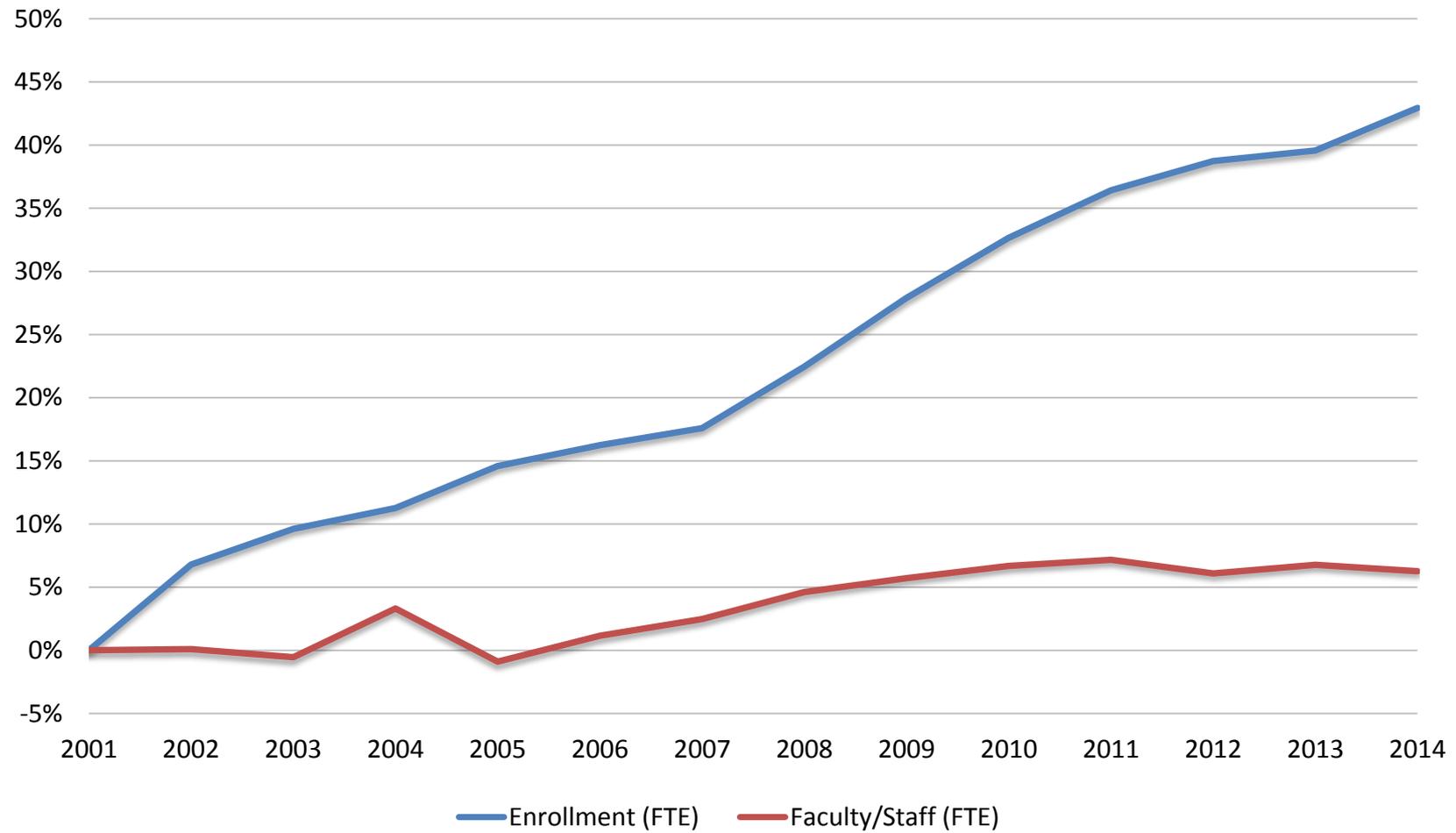
UM - State Appropriations plus Net Tuition & Fees per FTE Student Down 28% in Real Value



With Strong Budget Management, Operating Expense per Degree Awarded Dropped



Enrollment Growth has Outpaced Growth in Faculty and Staff





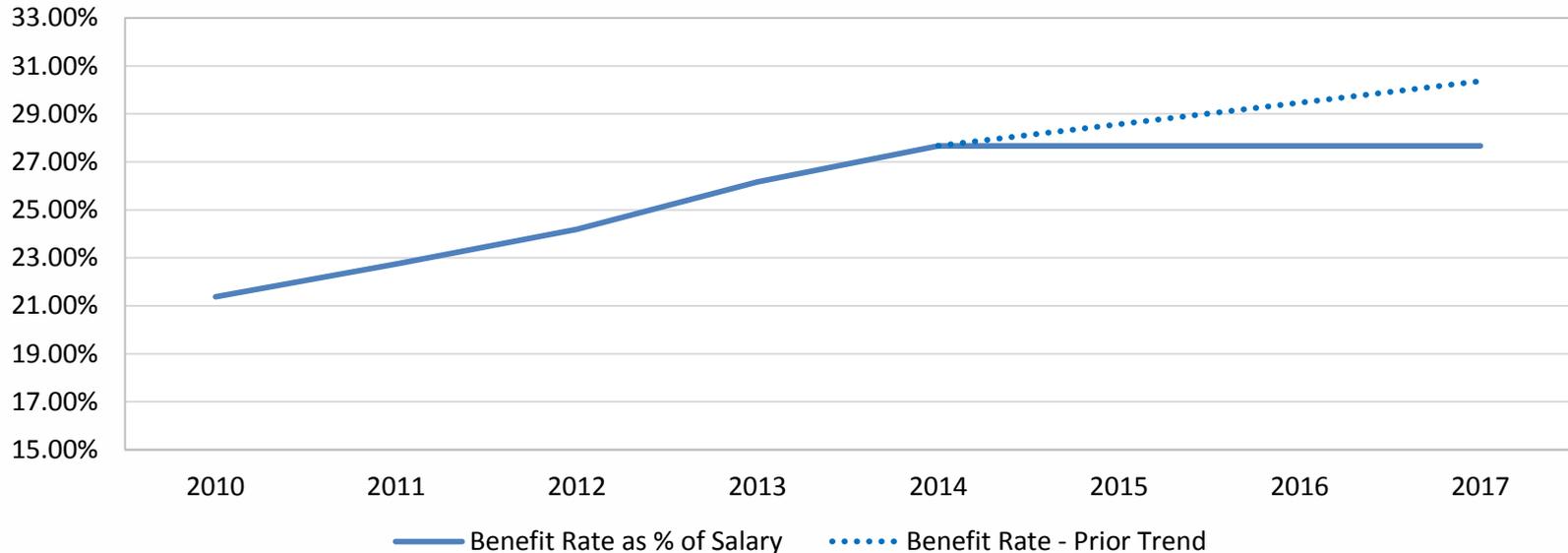
System Wide & Campus Activities to Achieve Efficiency and Effectiveness

Leveraging Technology for Efficiency & Effectiveness

- Implemented ePAF(Electronic Personnel Action Forms) to standardize processes and create electronic smart forms to speed the approval process
- Embraced the principles of shared services to consolidate and standardize the back office Accounts Payable processes
- Created electronic approval routing for grant submission to speed up the approval process
- Conservatively savings is estimated to be in excess of \$2.75 million annually for these changes

Total Rewards Task Force Targets Benefit Spend

– *Benefit Rate to be Held Flat for 3 Years*



- *No increase to Benefit Rate generates cost avoidance: \$9 million in cost avoidance for 2015, \$18 million for 2016, and \$27 million for 2017 while value of benefits remain competitive*
- *New Custom Network Plan provides more care to Employees in Columbia area via University Healthcare, keeping the dollars within the University as a whole and allows the University to reduce total medical benefit expense*

Strategic Use of eProcurement

- UM System Supply Chain continues to enhance savings through strategic initiatives
 - *Continued to increase on contract spend through the use of Show-Me-Shop to generate savings*
 - *Reorganized and rebranded supply chain to be more efficient and improve leadership development*
 - *Expanded services with a culture of credible program delivery and meeting or exceeding all shared service agreements*
 - *These steps along with initiatives from prior years have created average **annual savings of approximately \$15 million***

UM System Supply Chain Value Analysis Program Implementation

- Value Analysis Program Implementation (Physician driven)
 - Achieved **\$9.3M in savings** based on a goal of \$7.69M in FY14
 - Medical Supplies Expense in FY14 **decreased by \$643,699** (0.7%) while the number of patient days increased by 3,903 (3.1%) compared to FY13
 - University Hospital OR Medical Supply Expense has **decreased \$217/case** compared to prior fiscal year with 126 more cases performed
 - Missouri Orthopedic Institute OR Medical Supply Expense has **decreased \$146/case** compared to prior fiscal year with 84 more cases performed

Creating Value Through Strategic Management of our Debt and Investments

- Structured recent debt refinance transactions to generate upfront savings immediately available for strategic investment
 - *Invested in M&R - \$15.3 million from 2011-12 refinancing*
 - *Available for Investment - \$26.1 million from 2013 – 2014 refinancing*
- Sound management of General Pool investments enabled issuance of a first time \$9.6 million dividend for FY 14
- These actions generated **\$51 million in new resources** for the University to help address critical needs

Completed Staff Compensation Project

- Campus-wide project began in 2010 and was finalized in April 2014
 - *Created consistency and equity in job evaluation and pay structure*
 - **5,000 staff titles to 700**
 - **1,100 pay ranges to 19**
 - *Created consistent titling and pay structure across campuses for first time in decades*
 - *Provides more accurate market comparisons for efficient talent management*

Key Campus Initiatives

- MU implemented a strategic reallocation process that returns 2% from every sector for reallocation and will allow for over \$35M to be reinvest in highest priorities
- UMKC managed labor costs by evaluating and redistributing work load; on-going review of all hiring requests across the campus
- UMSL consolidated library operations and reduced annual cost by \$250,000.
- Missouri S&T developed academic department productivity measures which will drive resource allocation



Advancing *Missouri*™

**The Way Forward: *Continue to
Increase Effectiveness &
Efficiency***

Financial Condition Remains Strong

➤ Aa1/AA+ ratings reaffirmed by Moody's and S&P

“Historically, the system has effectively managed through operating and capital appropriation cuts, and we consider UM’s budgeting to be both conservative and proactive.”

- recent S&P rating report comment

“Prudent fiscal management, with a focus on cost containment, enabled the university to produce consistently positive operations despite variable state appropriations.”

– recent Moody’s rating report comment

However continued cost pressure is not going away...

- **“The time of comfortable annual growth in enrollments and revenues is over for most institutions”** – *National Commission on College and University Board Governance*
- As Mr. Curry stated, efforts to wring out costs from the administrative side are **“far from exhausted.”** But that may not be enough. **“At some point,”** he says, **“productivity gains have to come from the academic sector itself.”** – *Chronicle of Higher Education*

Initiatives to improve efficiency and effectiveness going forward

- *Implement the recommendations of the Enterprise Resource Planning (ERP) optimization project and data center consolidation*
- *Evaluate additional benefit plan options as recommended by the Total Rewards Task Force*
- *Continue to leverage the staff compensation project for efficient and effective talent management*
- *Implement Voluntary Separation Program to provide flexibility in funding new faculty positions*

Initiatives to improve efficiency and effectiveness going forward continued...

- ***Continue to implement best practices from the PwC Finance review including:***
 - ***Defining the Finance function and roles***
 - ***Improve fiscal staff training and fiscal accountability***
 - ***Enhancing the utilization of shared services***
- ***Implement a plan to address deferred maintenance and space utilization***
- ***Evaluate a managed travel program***

Questions?